GTAS October Monthly Report

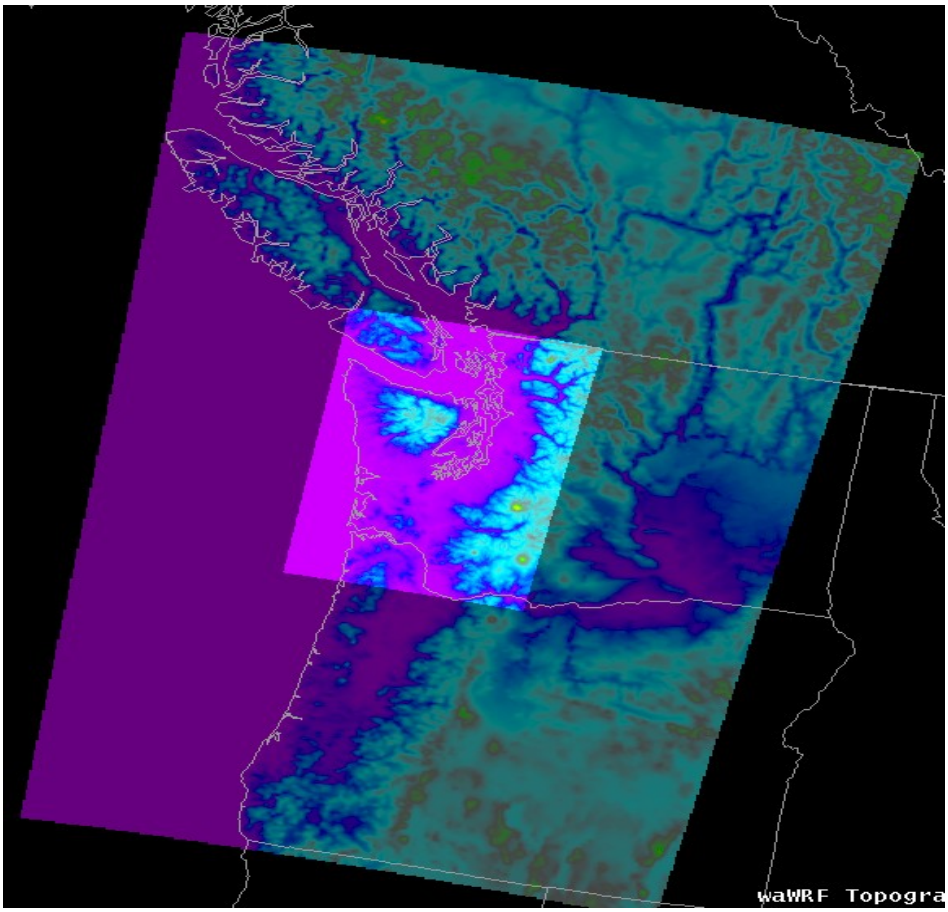
Our work in October involved the whole spectrum of activities. There were bug fixes, new development, client software deployment in the Seattle area EOCs and the NWS WFO, on-site training, and arrangements were made to visit the NYC WFO and their local EOC next month.

GTAS Development

- Bug fixes
  We fixed a problem with our high-resolution wind and stability data ingest, processing and storing routines that are needed to support the dispersion model. We also fixed a database purging problem here on our development system. As we added more data sets the directories were filling up not allowing new real-time data to be stored.

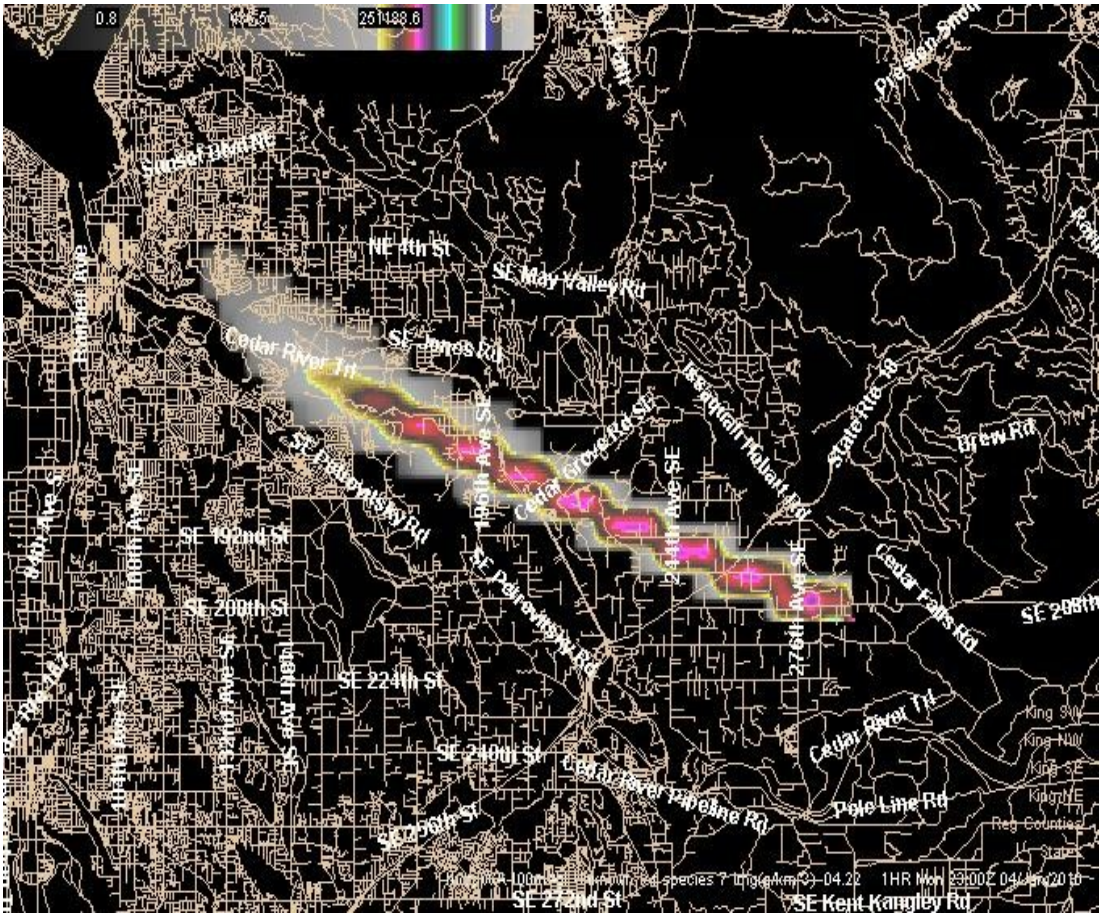
- New development
  We iterated with the Seattle WFO on the relative high-resolution WRF wind and stability domains that should be used to initialize the plume model. We agreed that the outer 4-km domain and inner 2-km domain should cover the areas shown below.

  GTAS Seattle Area Domains

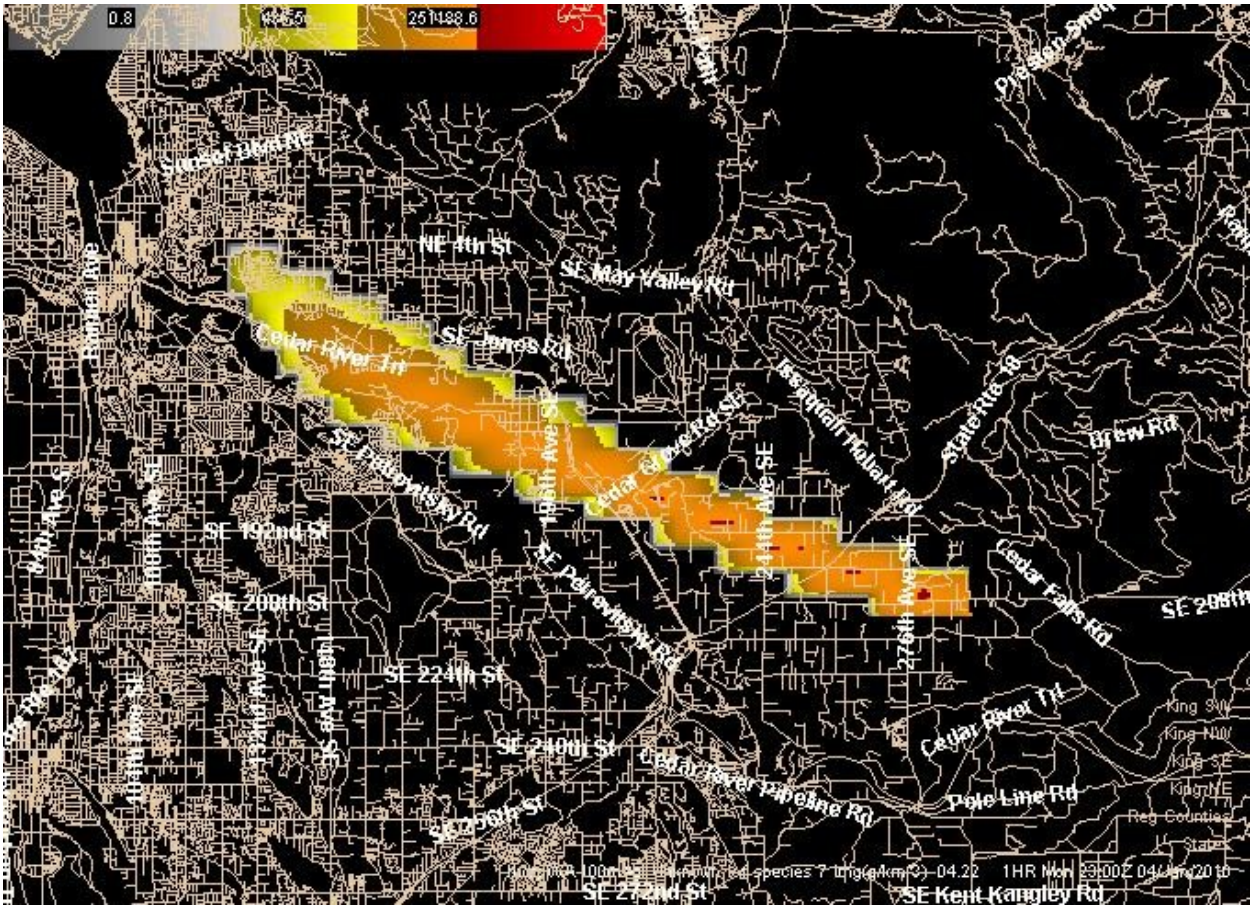


- Color Table Changes
  We sent examples of the toxic plume color tables that we were initially using for GTAS to the Seattle EOC. The feedback we received was interesting… they suggested that we change them to be consistent with the "Computer-Aided Management of Emergency Operations" (CAMEO) color table scheme. These are color tables widely used by EOCs, the EPA and other agencies that show hazardous concentrations of various environmental threats. We changed the color tables accordingly. An example of the original color table is shown below followed by the new color table – both for the same plume:

Old Toxic Plume Color Table



New Toxic Plume Concentration Color Table



- GTAS Seattle Area Communications
  We worked with the NWS to resolve firewall issues to allow the Seattle area EOCs connectivity to the GTAS server in the Salt Lake City Western Region Headquarters. The set up here is different than the one that is used in Southern Region.

- Seattle Area Deployment and On-Site Training
  After the GTAS client deployment to Seattle was completed Greg Pratt, Leigh Cheatwood, Rich Jesuroga, Roland Draxler and Glenn Rolph conducted on-site training to the NWS WFO, the Seattle EOC and the Seattle Public Utilities EOC. Leigh and Rich conducted the training at the Seattle EOC and the WFO covering both day and evening shifts at each site. Roland and Glenn trained users at each site on the use and interpretation of the toxic plume model. Each day, all of the NOAA trainers switched sites. This insures that users receive more expansive training than only one trainer can

do alone. It also establishes working relationships between users and developers for further discussions and iterations. The Seattle WFO wanted the GTAS Client installed on their big screen. See below:

Upon watching the GTAS training at the WFO, the NOAA Office of Restoration and Response (located in the same building) also expressed an interest for the GTAS Client for shared situational awareness among all agencies. We will return to Seattle to finish the deployment and training to the State EOC.

- Other Miscellaneous Activities
  Greg set up the machines needed for the IAEM Conference in Orlando.

  We began discussions with the NYC WFO, Regional Headquarters and their Brookhaven EOC for GTAS deployment. This included mapping out respective 4-km and 2-km domains for the local model data needed to initialize the toxic plume model.

  We worked with Gary Ham from FEMA to modified code that brings GTAS CAP V1.1 into IPAWS formatting compliance.

  We secured high-performance computer run cycles to support the GTAS deployment to Seattle.

We conducted recurring training exercises for the SR WFO and EOC using a hazardous release training scenario.